replaced by recent graduates, who are more likely to use one, or even two. In addition, as dentists' workloads increase, they are expected to hire more assistants to perform routine tasks, so they may devote their own time to more profitable procedures.

Numerous job openings for dental assistants will arise from the need to replace assistants who leave the occupation. For many, this entry-level occupation provides basic training and experience and serves as a stepping-stone to more highly skilled and higher paying jobs. Other assistants leave the job to take on family responsibilities, return to school, retire, or for other reasons.

#### **Earnings**

Median hourly earnings of dental assistants were \$10.88 in 1998. The middle 50 percent earned between \$8.94 and \$13.11 an hour. The lowest 10 percent earned less than \$7.06 and the highest 10 percent earned more than \$15.71 an hour.

# **Related Occupations**

Workers in other occupations supporting health practitioners include medical assistants, physical therapist assistants, occupational therapy assistants, pharmacy technicians and assistants, and veterinary assistants.

#### **Sources of Additional Information**

Information about career opportunities, scholarships, accredited dental assistant programs, and requirements for certification is available from:

✓ Commission on Dental Accreditation, American Dental Association,
211 E. Chicago Ave., Suite 1814, Chicago, IL 60611.

## Internet: http://www.ada.org

Dental Assisting National Board, Inc., 676 North Saint Clair, Suite 1880, Chicago, IL 60611. Internet: http://www.dentalassisting.com

For general information about a career as a dental assistant, including training and continuing education, contact:

← American Dental Assistants Association, 203 North LaSalle St., Suite 1320, Chicago, IL 60601.

For information about a career as a dental assistant and schools offering training, contact:

◆ National Association of Health Career Schools, 2301 Academy Dr., Harrisburg, PA 17112.

Information about certification as a dental assistant is available from: American Medical Technologists, 710 Higgins Rd., Park Ridge, IL 60068-5765. Internet: http://www.amt1.com

# **Medical Assistants**

(O\*NET 66005 and 66099A)

# **Significant Points**

- Medical assistants is expected to be one of the 10 fastest growing occupations through the year 2008.
- Job prospects should be best for medical assistants with formal training or experience.

#### Nature of the Work

Medical assistants perform routine administrative and clinical tasks to keep the offices and clinics of physicians, podiatrists, chiropractors, and optometrists running smoothly. They should not be confused with physician assistants who examine, diagnose, and treat patients under the direct supervision of a physician. (Physician assistants are discussed elsewhere in the *Handbook*.)

The duties of medical assistants vary from office to office, depending on office location, size, and specialty. In small practices, medical assistants are usually "generalists," handling both administrative and clinical duties and reporting directly to an office manager, physician, or other health practitioner. Those in large practices tend to specialize in a particular area under the supervision of department administrators.



Medical assistants perform many administrative duties.

Medical assistants perform many administrative duties. They answer telephones, greet patients, update and file patient medical records, fill out insurance forms, handle correspondence, schedule appointments, arrange for hospital admission and laboratory services, and handle billing and bookkeeping.

Clinical duties vary according to State law and include taking medical histories and recording vital signs, explaining treatment procedures to patients, preparing patients for examination, and assisting the physician during the examination. Medical assistants collect and prepare laboratory specimens or perform basic laboratory tests on the premises, dispose of contaminated supplies, and sterilize medical instruments. They instruct patients about medication and special diets, prepare and administer medications as directed by a physician, authorize drug refills as directed, telephone prescriptions to a pharmacy, draw blood, prepare patients for x rays, take electrocardiograms, remove sutures, and change dressings.

Medical assistants may also arrange examining room instruments and equipment, purchase and maintain supplies and equipment, and keep waiting and examining rooms neat and clean.

Assistants who specialize have additional duties. *Podiatric medical assistants* make castings of feet, expose and develop x rays, and assist podiatrists in surgery. *Ophthalmic medical assistants* help ophthalmologists provide medical eye care. They administer diagnostic tests, measure and record vision, and test the functioning of eyes and eye muscles. They also show patients how to use eye dressings, protective shields, and safety glasses, and how to insert, remove, and care for contact lenses. Under the direction of the physician, they may administer medications, including eye drops. They also maintain optical and surgical instruments and assist the ophthalmologist in surgery.

# **Working Conditions**

Medical assistants work in well-lighted, clean environments. They constantly interact with other people, and may have to handle several responsibilities at once.

Most full-time medical assistants work a regular 40-hour week. Some work part-time, evenings, or weekends.

# **Employment**

Medical assistants held about 252,000 jobs in 1998. Sixty-five percent were in physicians' offices, and 14 percent were in offices of other health practitioners such as chiropractors, optometrists, and podiatrists. The rest were in hospitals, nursing homes, and other health care facilities.

#### Training, Other Qualifications, and Advancement

Most employers prefer to hire graduates of formal programs in medical assisting. Such programs are offered in vocational-technical high schools, postsecondary vocational schools, community and junior colleges, and in colleges and universities. Postsecondary programs usually last either 1 year, resulting in a certificate or diploma, or 2 years, resulting in an associate degree. Courses cover anatomy, physiology, and medical terminology as well as typing, transcription, recordkeeping, accounting, and insurance processing. Students learn laboratory techniques, clinical and diagnostic procedures, pharmaceutical principles, medication administration, and first aid. They study office practices, patient relations, medical law, and ethics. Accredited programs include an internship that provides practical experience in physicians' offices, hospitals, or other health care facilities.

Although formal training in medical assisting is available, such training—while generally preferred—is not always required. Some medical assistants are trained on the job, although this is less common than in the past. Applicants usually need a high school diploma or the equivalent. Recommended high school courses include mathematics, health, biology, typing, bookkeeping, computers, and office skills. Volunteer experience in the health care field is also helpful.

Two agencies recognized by the U.S. Department of Education accredit programs in medical assisting: the Commission on Accreditation of Allied Health Education Programs (CAAHEP) and the Accrediting Bureau of Health Education Schools (ABHES). In 1999, there were about 450 medical assisting programs accredited by CAAHEP and over 140 accredited by ABHES. The Committee on Accreditation for Ophthalmic Medical Personnel accredited 14 programs in ophthalmic medical assisting.

Although there is no licensing for medical assistants, some States require them to take a test or a short course before they can take x rays or perform other specific clinical tasks. Employers prefer to hire experienced workers or certified applicants who have passed a national examination, indicating that the medical assistant meets certain standards of competence. The American Association of Medical Assistants awards the Certified Medical Assistant credential; the American Medical Technologists awards the Registered Medical Assistants awards the Podiatric Medical Assistant Certified credential; and the Joint Commission on Allied Health Personnel in Ophthalmology awards the Ophthalmic Medical Assistant credential at three levels: Certified Ophthalmic Assistant, Certified Ophthalmic Technician, and Certified Ophthalmic Medical Technologist.

Because medical assistants deal with the public, they must be neat and well-groomed and have a courteous, pleasant manner. Medical assistants must be able to put patients at ease and explain physicians' instructions. They must respect the confidential nature of medical information. Clinical duties require a reasonable level of manual dexterity and visual acuity.

Medical assistants may be able to advance to office manager. They may qualify for a variety of administrative support occupations, or may teach medical assisting. Some, with additional education, enter other health occupations such as nursing and medical technology.

#### Job Outlook

Employment of medical assistants is expected to grow much faster than the average for all occupations through the year 2008 as the health services industry expands due to technological advances in medicine, and a growing and aging population. It is one of the fastest growing occupations.

Employment growth will be driven by the increase in the number of group practices, clinics, and other health care facilities that need a high proportion of support personnel, particularly the flexible medical assistant who can handle both administrative and clinical duties. Medical assistants primarily work in outpatient settings, where much faster than average growth is expected.

In view of the preference of many health care employers for trained personnel, job prospects should be best for medical assistants with formal training or experience, particularly those with certification.

#### **Earnings**

The earnings of medical assistants vary, depending on experience, skill level, and location. Median annual earnings of medical assistants were \$20,680 in 1998. The middle 50 percent earned between \$17,020 and \$24,340 a year. The lowest 10 percent earned less than \$14,020 and the highest 10 percent earned more than \$28,640 a year. Median annual earnings in the industries employing the largest number of medical assistants in 1997 were as follows:

Offices and clinics of medical doctors	\$20,800
Hospitals	20,400
Offices of osteopathic physicians	19,600
Health and allied services, nec	19,300
Offices of other health practitioners	18,500

## **Related Occupations**

Workers in other medical support occupations include medical secretaries, hospital admitting clerks, pharmacy helpers, medical record clerks, dental assistants, occupational therapy aides, and physical therapy aides.

#### **Sources of Additional Information**

Information about career opportunities, CAAHEP-accredited educational programs in medical assisting, and the Certified Medical Assistant exam is available from:

◆ The American Association of Medical Assistants, 20 North Wacker Dr., Suite 1575, Chicago, IL 60606-2903.

Internet: http://www.aama-ntl.org

Information about career opportunities and the Registered Medical Assistant certification exam is available from:

Registered Medical Assistants of American Medical Technologists, 710 Higgins Rd., Park Ridge, IL 60068-5765.

Internet: http://www.amt1.com

For a list of ABHES-accredited educational programs in medical assisting, write:

Accrediting Bureau of Health Education Schools, 803 West Broad St., Suite 730, Falls Church, VA 22046. Internet: http://www.abhes.org For information about a career as a medical assistant and schools offering training, contact:

National Association of Health Career Schools, 2301 Academy Dr., Harrisburg, PA 17112.

Information about career opportunities, training programs, and the Certified Ophthalmic Assistant exam is available from:

Internet: http://www.jcahpo.org

Information about careers for podiatric assistants is available from:

◆ American Society of Podiatric Medical Assistants, 2124 S. Austin Blvd., Cicero, IL 60650.

# **Nursing and Psychiatric Aides**

(O\*NET 66008 and 66014)

# **Significant Points**

- Job prospects for nursing aides will be good because of fast growth and high turnover in this large occupation.
- Minimum education or training is generally required for entry level jobs, but earnings are low.

# Nature of the Work

Nursing and psychiatric aides help care for physically or mentally ill, injured, disabled, or infirm individuals confined to hospitals, nursing or residential care facilities, and mental health settings. (Home health and personal care aides, whose duties are similar but who work in clients' homes, are discussed elsewhere in the *Handbook*.)